

TITLE

LAC SHUTTLE VECTORS

ABSTRACT OF THE DISCLOSURE

5           The invention discloses a Lac shuttle vector,  
comprising at least (a) a region which regulates a plasmid  
copy number; (b) an eukaryotic gene expression cassette,  
which comprises at least an eukaryotic gene transcriptional  
promoter sequence, a multiple cloning site and a  
10 transcriptional terminator sequence; (c) a lactic acid  
bacteria plasmid sequence, which comprises a plus origin of  
replication, and a nucleic acid sequence encoding for a  
protein which relates to the lactic acid bacteria plasmid  
replication; and (d) a non-antibiotic resistance selection  
15 gene and the promoter sequence thereof. The Lac shuttle  
vector features a non-antibiotic resistance gene as a  
selection marker, which is useful in pharmaceuticals and  
foods.